

PROJECT DESCRIPTION  
GENERAL

THIS PROJECT INVOLVES THE INSTALLATION OF A NEW TRAFFIC SIGNAL AT THE INTERSECTION OF LEGION ROAD WAL-MART ENTRANCE IN CAROLINE COUNTY. LEGION ROAD IS CONSIDERED TO RUN IN A NORTH/SOUTH DIRECTION.

INTERSECTION OPERATION

A CONTROLLER HOUSED IN A BASE MOUNTED CABINET SHALL BE INSTALLED AT THIS LOCATION. THE INTERSECTION WILL OPERATE IN A FULLY ACTUATED MODE USING 4 NEMA PHASES. THERE WILL BE AN EXCLUSIVE/PERMISSIVE LEFT TURN PHASE FOR NORTHBOUND MOVEMENT OF LEGION ROAD. THE LEGION ROAD THROUGH MOVEMENTS WILL OPERATE CONCURRENTLY. THE WAL-MART ENTRANCE MOVEMENT WILL OPERATE ALONE.

ALL INTERNAL CABINET WIRING SHALL BE PERFORMED BY THE SHA SIGNAL SHOP. CONTRACTOR SHALL CONTACT ED RODENHIZER 72 HOURS PRIOR TO CONSTRUCTION.

EQUIPMENT LIST

- A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATION.  
NONE.
- B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

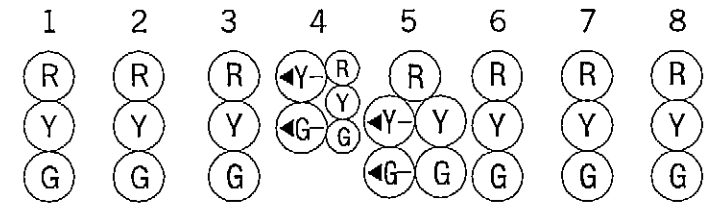
QUANTITY	UNITS	DESCRIPTION
LUMP SUM	LS	MAINTENANCE OF TRAFFIC
LUMP SUM	LS	MOBILIZATION
1	EA	27 FT. STEEL MAST ARM POLE WITH 70 FT. MAST ARM
2	EA	27 FT. STEEL MAST ARM POLE WITH 50 FT. MAST ARM
2	EA	20 FT. LUMINAIRE ARM
2	EA	250W HPS LAMP AND LUMINAIRE
1	EA	STANDARD S.H.A. TRAFFIC SIGNAL CONTROLLER, BASE MOUNTED NEMA 6 CABINET, VIDEO DETECTION INTERFACE, TELEMETRY INTERFACE EQUIPMENT, AND ONE (1) FOUR-CHANNEL LOOP DETECTOR AMPLIFIER [Note: CONTROLLER AND CABINET SHALL BE PURCHASED FROM ECONOLITE AND DELIVERED TO THE S.H.A. SIGNAL SHOP FOR WIRING AND TESTING. CONTACT MR. ED RODENHIZER (410) 787-7650]
2	EA	TERRA VIDEO DETECTOR CAMERA
550	LF	TERRA VIDEO DETECTOR CAMERA CABLE
3	EA	NON-INVASIVE PROBE (SET OF 3) WITH 500 FT. LEAD-IN CABLE
6	EA	12 IN. 3-SECTION LED SIGNAL HEAD - MAST
1	EA	12 IN. 5-SECTION LED SIGNAL HEAD - MAST
1	EA	8 IN./12 IN. 5-SECTION LED SIGNAL HEAD - MAST
2	EA	24 IN X 24 IN W16-14(1) & 36 IN. X 36 IN. W3-3 - "NEW" & WARNING SIGN - GROUND MOUNTED
1	EA	20 IN. X VAR. D-3(1) SIGN - MAST ARM
1	EA	48 IN. X 72 IN. SHIELD ASSEMBLY SIGN - GROUND MOUNTED
1	EA	30 IN. x 36 IN. R3-5(R) SIGN - MAST ARM
1	EA	30 IN. x 36 IN. R3-5(L) SIGN - MAST ARM
30	LF	4 IN. X 4 IN. WOOD SIGN SUPPORTS
4	CY	TEST PIT EXCAVATION
10	EA	HANDHOLE
50	LF	1-CONDUCTOR (NO. 8 A.W.G.)
425	LF	2-CONDUCTOR TRAY CABLE (NO. 12 AWG)
90	LF	5-CONDUCTOR CABLE (NO. 14 AWG)
1200	LF	7-CONDUCTOR CABLE (NO. 14 AWG)
325	LF	BARE COPPER GROUND WIRE (NO. 6 AWG)
45	LF	2 IN. PVC CONDUIT [SCHEDULE 80] - TRENCHED
500	LF	3 IN. PVC CONDUIT [SCHEDULE 80] - TRENCHED
95	LF	3 IN. PVC CONDUIT [SCHEDULE 80] - BORED
20	LF	4 IN. PVC CONDUIT [SCHEDULE 80] - TRENCHED
400	LF	4 IN. PVC CONDUIT [SCHEDULE 80] - BORED
11.8	CY	CONCRETE FOUNDATION FOR TRAFFIC SIGNAL EQUIPMENT
5	EA	GROUND ROD - 3/4 IN. X 10 FT. LENGTH
66	LF	4 IN. X 6 IN. WOOD SIGN SUPPORTS
1	EA	EMBEDDED ELECTRICAL SERVICE PEDESTAL (100 AMPS)
120	LF	24 IN. WHITE THERMOPLASTIC PAVEMENT MARKING - STOP LINE

PROJECT CONTACTS:

MR. JEFFREY WENTZ, ASSISTANT DISTRICT ENGINEER - TRAFFIC  
PHONE: (410) 810-3240  
MR. NORRIS EMBERT, ASSISTANT DISTRICT ENGINEER - CONSTRUCTION  
PHONE: (410) 810-3210  
MR. MIKE LEWIS, ASSISTANT DISTRICT ENGINEER - MAINTENANCE  
PHONE: (410)  
MR. BARRY CLOTHIER, UTILITY ENGINEER  
PHONE: (410) 810-3275  
MR. RICHARD L. DAFF, SR. CHIEF TRAFFIC OPERATIONS DIVISION  
PHONE: (410) 787-7630  
MR. EDWARD RODENHIZER, SUPERVISOR, SIGNAL OPERATIONS  
PHONE: (410) 787-7652

THE POWER COMPANY REPRESENTATIVE IS:  
MR. ALLEN LORD  
CHOPTANK ELECTRICAL SERVICE  
24820 MEETING HOUSE ROAD (ROUTES 404 & 328)  
P.O. BOX 430  
TEL: 410-479-8612  
DENTON, MARYLAND

Phase Chart

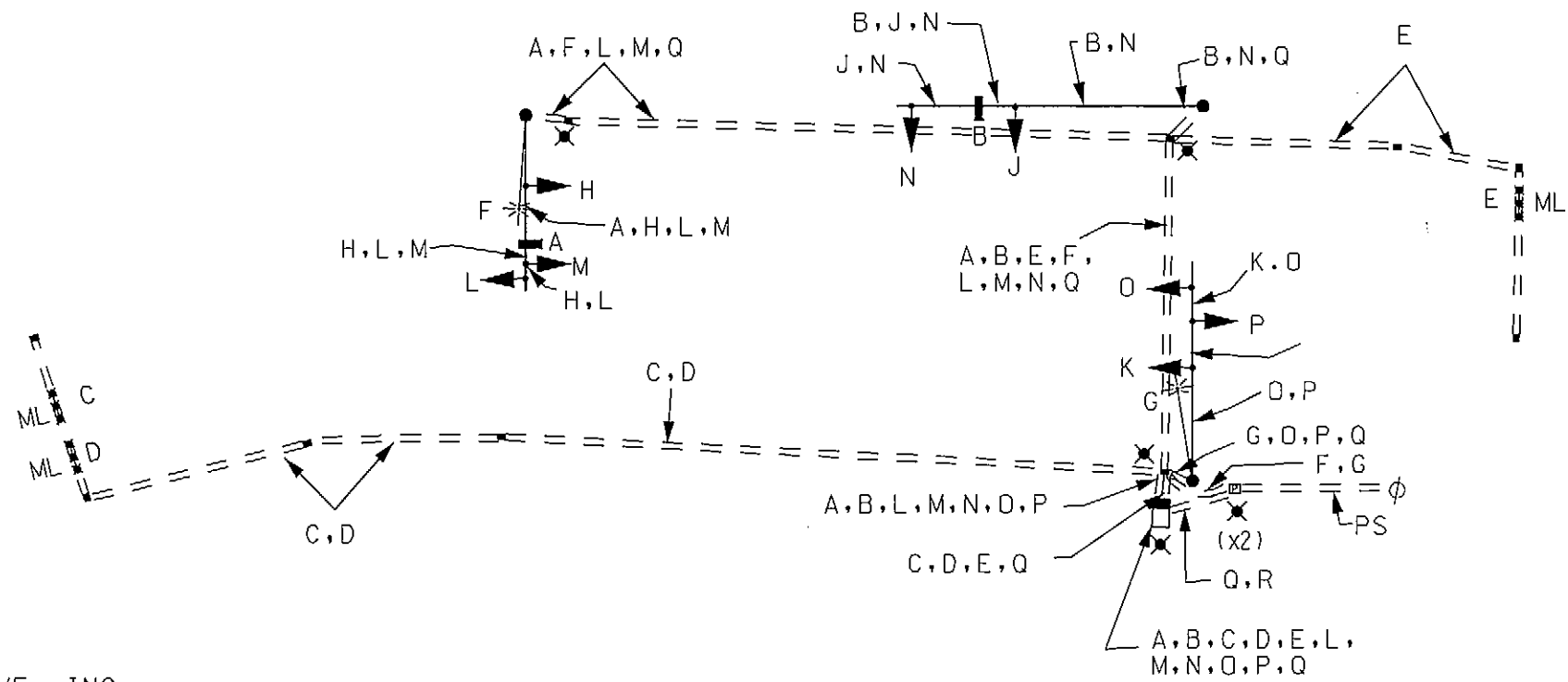


PHASE 2 AND 5	R	R	R	←GG	←GG	G	R	R	←
5 CHANGE	R	R	R	←YG	←YG	G	R	R	←
PHASE 2 AND 6	G	G	G	G	G	G	R	R	←
2 AND 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	←
PHASE 4	R	R	R	R	R	R	G	G	↑
4 CHANGE	R	R	R	R	R	R	Y	Y	↑
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	↑


KEY

- A } VIDEO DETECTOR CABLE  
B }  
C } NON-INVASIVE MICRO-LOOP  
D } DETECTOR LEAD-IN CABLE  
E }  
F } 2-CONDUCTOR TRAY CABLE  
G } (NO. 12 A.W.G.)  
H } 5-CONDUCTOR ELECTRICAL  
J } CABLE (NO. 14 A.W.G.)  
K }  
L } 7-CONDUCTOR ELECTRICAL  
N } CABLE (NO. 14 A.W.G.)  
O }  
P }  
Q } BARE COPPER GROUND  
R } WIRE (NO. 6 A.W.G.)  
S } 1-CONDUCTOR (NO. 8 A.W.G.) (2 PIECES)  
T } FOR TRAFFIC SIGNAL ELECTRICAL SERVICE  
U }  
V } PROPOSED UNDERGROUND ELECTRICAL  
W } SERVICE BY CHOPTANK ELECTRIC COOPERATIVE, INC  
X }  
Y } MICRO-LOOP DETECTOR  
Z } (NON-INVASIVE)  
AA } PROPOSED GROUNDING ROD

Wiring Diagram



GENERAL INFORMATION SHEET  
LEGION ROAD AND WAL-MART ENTRANCE

REVISIONS	SCALE: N/A	 <div>The Traffic Group, Inc. Suite H 9900 Franklin Square Drive Baltimore, Maryland 21236 410-931-6600 1-800-583-8411 Fax 410-931-6601 "Merging Innovation and Excellence"®</div>
	DATE: APRIL 6, 2011	
	DESIGNED BY: FRANK HOECKEL	
	CHECKED BY: SR TEPD 7-7-11	
	JOB NO.: SHA BW996MBZ 2004-113A	
	LOCATION: TMS K413 CAROLINE COUNTY	
	DRAWING: 2 OF 2	

PLOTTED: Tuesday, July 19, 2011 AT 10:48 AM  
FILE: F:\2004\2004-113A\Des\ps3G-P001\_Legion Rd-Site Access.dgn

Sheet NO. 4 of 6